

**MANCHESTER, VERMONT  
EMERGENCY MEDICAL SERVICES  
& PANDEMIC PLANNING  
STUDY**

**Prepared by:**



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## **I. Introduction**

The Town of Manchester contracted with Municipal Resources, Inc. (MRI) to review and if required, make appropriate recommendations for change within the following four public health focus areas:

- Provision of prehospital care and patient transportation
- Emergency Medical Services (EMS) response and data analysis
- Evaluation of pandemic planning
- Assessment of pandemic-based risk

In 2015 a public safety study that included an evaluation of the provision of EMS to Manchester and Dorset was conducted. The 2015 study presented 13 recommendations that were not substantively acted upon. Although this study considered the 2015 findings and recommendations, this project was focused exclusively on the needs and service level provided to the Town of Manchester.

Using the parameters listed above, our team reviewed the organization and delivery of EMS within the community including conducting a target hazard analysis, a review of response metrics, consideration of stakeholder concerns and a review of the current facility and apparatus set. Our project team has developed recommendations for improvements that take into consideration the current and future needs of the Town of Manchester. These recommendations encompass considering several service configuration options and presentation appropriate modifications to the delivery system to provide the desired level of services to the Town of Manchester.

This document contains recommendations for improvement to organizational practices, communications, partnership development and the effective deployment of resources. This report outlines appropriate strategic modifications to the EMS system required to enhance the EMS service level provided to the Town of Manchester. Through this report, our team presents a series of observations and findings that aid in the determination of whether the current organizational structure is sustainable or should be modified. The project team has developed this document as an expansion of the public presentation delivered to the Manchester Select Board on January 11, 2022.

It is our hope that the information presented in this document serves to Initiate a community dialogue that results in an increased quality of service for all those that live, work and visit Manchester. Our goals include:

- Opening communications
- Create more responsive relationships
- Initiating conversations relative to how the community can manage the new reality of pandemic-based risk
- Determination of an appropriate level of service
- Enhanced operational performance

Our team believes that it would be counterproductive to react to these findings by “circling the wagons” against Manchester’s concerns and cement positions without listening and engaging in open and productive dialogue on the numerous issues documented through this process.

## **II. The Town of Manchester**



*Figure 1 - An image of Manchester Vermont*

Located in southern Vermont, Manchester is a vibrant community within Bennington County. The Town is situated between the Green Mountains to the east and Taconic Range to the west. From shopping and dining, to cultural, recreational and community events, Manchester is a quintessential New England community.

The Town consists of 42.2 square miles and has a population of 4,484 (2020 census). Manchester Village and Manchester Center are two settlement centers within the community. Manchester has become a highly desirable tourist destination and recreational center, especially for those from New York, New Jersey and southern New England. The Town continues to benefit from a high level of growth and development.

Currently Manchester has the following demographic profile:

Manchester has 1,819 households, and 1,156 families residing in the town. The population density is 99.0 people per square mile. There are 2,456 housing units at an average density of 58.2 per square mile. The racial makeup of the town is 97.87% White, 0.38% Black or African American, 0.17% Native American, 0.31% Asian, 0.43% from other races, and 0.84% from two or more races. Hispanic or Latino of any race are 1.75% of the population. Of all households 30.5% are made up of individuals, and 14.0% has someone

living alone who was 65 years of age or older. The average household size is 2.26 and the average family size was 2.81. In the town, the population is spread out, with 23.1% under the age of 18, 4.0% from 18 to 24, 25.0% from 25 to 44, 28.8% from 45 to 64, and 19.1% who are 65 years of age or older. Manchester is a very educated community with 54.7% of residents having a college degree and 12.73% with some advanced education.

The median income for a household in the town is \$47,196, and the median income for a family is \$59,191. Males has a median income of \$36,453 versus \$26,017 for females. The per capita income for the town was \$30,499. About 2.2% of families and 4.6% of the population are below the poverty line, including 1.9% of those under age 18 and 6.5% of those age 65 or over.

Compared to the other four Towns served by the current EMS provider, Manchester is unique in that the community is focused on strategic economic growth through the development of recreational opportunities and sports tourism. In addition, Manchester has unique service level needs based on the following factors:

- Manchester has the largest population
- Manchester is an emerging tourism destination
- Manchester serves as a regional hub
- Manchester hosts the most regional entertainment and sports facilities
- Manchester has an increasing presence of senior housing
- Manchester serves as a retail center for the area
- Manchester has the largest presence of schools and students
- Manchester hosts numerous regional events and festivals

### **III. Current EMS Service Overview**

The Town of Manchester, as well as the towns of Dorset, Danby, Mt. Tabor and Winhall (see figure 3 on page seven) have contracted with Northshire Rescue Squad (NRS) to provide Emergency Medical Services (EMS) to their communities. NRS was previously known as Manchester Rescue Squad (MRS).



NRS is a private nonprofit 501(c)3 organization that is based out of the Manchester Public Safety Building and is overseen by a seven-member Board of Directors and is daily managed by a Chief of Operations. Funding for the services is provided by the participating communities, a subscription service, fundraising, and billing for patient transportation services. Currently



NRS provides the region with one fully staffed advanced life support ambulance on a 24/7 basis. A second staffed unit is provided during daytime peak operational hours.

NRS operates three ambulances which are owned by communities within the region. Figure 2 provides an image of one of the NRS ambulances. A legal opinion confirmed that the Town of Manchester owns and holds the title to the 2015 ambulance. NRS responds to approximately 1,450 calls for service per year and functions with an operating budget of 1.1 million dollars per year. NRS is dispatched by the Manchester Dispatch Center, operated by the Town of Manchester.



*Figure 2 - Northshire Rescue Squad Ambulance*

#### **IV. Scope of Work**

This project included a review of emergency medical service (EMS) based technical assistance to the Town of Manchester. This included evaluating prehospital patient care and transportation, as well as the pandemic-based risk facing the community. To complete this project, we completed the following activities:

- Reviewed and updated the 2015 MRI study as it relates to EMS and Northshire Rescue Squad (NRS) operations (previously Manchester Rescue Squad).
- Provided the Town with a current assessment of the level of EMS service provided.
- Provided the Town alternative models (and examined status quo) to provide EMS to residents and visitors, that include detailed operational and financial plans.
- Provided an overview of the projected cost of each alternative.

- Identified a preferred strategic path and set of action items.
- Produced a fifteen-to-twenty-page document that provides the Selectboard and Town Manager an external practitioner-based perspective and identifies a series of action items that could potentially address the emerging issues.
- Provided other EMS technical assistance as directed by the Selectboard and Town Manager.

## **V. Methodology**

Our team conducted a detailed assessment of the current EMS system in Manchester. Upon completion of this review, the project team developed recommendations and a series of models for improvement. This report specifically provides the Town of Manchester with a practitioner based professional perspective and addresses the following six questions:

1. Is the current service operating in the best interest of the Town of Manchester and its residents.
2. Is the current service operating within the best practices of a Public Safety agency?
3. Is the current and projected cost of EMS in the current model the best for the Town of Manchester?
4. What viable options exist to provide continue EMS service for the Town of Manchester?
5. Is the current model of EMS providing an acceptable level of patient care and customer service?
6. Should the Town of Manchester create a municipal EMS department?
7. Could the program be a partnership with a health care provider?

To accomplish these tasks, our team employed seventeen work elements. These methodologies are listed below:

1. Reviewed pertinent service demand data.
2. Conducted a review of response activity.
3. Toured the community and reviewed target hazards.
4. Evaluated current pandemic planning and public health efforts within Manchester.
5. Assessed the level of pandemic-based risk facing the Town of Manchester.
6. Evaluated EMS service facilities and equipment.
7. Interviewed the Manchester Selectboard.
8. Interviewed the Manchester Town Manager.
9. Interviewed Manchester Fire Department Command Staff.
10. Interviewed Manchester Police Department Command Staff.
11. Interviewed Manchester Dispatch Personnel.
12. Interviewed two members of the NRS Board of Directors.
13. Interviewed the NRS COOS.
14. Interviewed health care providers within Manchester.
15. Reviewed NRS contract documents, budgets, and communications.
16. Reviewed various Town and NRS documents and budgets.
17. Worked with the Town Manager to develop a perspective on the community and EMS service level expectation.

The work elements listed above contributed to the delivery of the following project elements:

- Conducted a work session with the Selectboard to relative to contract negotiations and pandemic planning.
- Developed three options focused on improving EMS delivery in Manchester.
- Developed and delivered a public presentation through a January 11, 2022, meeting with the Selectboard.

## **VI. Current EMS Operations**

The current EMS service is provided by the Manchester Rescue Squad d/b/a Northshire Rescue Squad (NRS) that is a 501(c)3 not for profit organization that operates autonomously out of the town-owned Manchester Public Safety Building. NRS is governed by a seven-person Board of Directors who services the Towns of Manchester, Dorset, East Dorset, Mt. Tabor, Danby and a part of Winhall. According to the Rescue Squads web site, they have a staff level of 24 people that are at different certification levels and abilities to provide service as previously outlined in this report.



**Figure 3 - NRS Service Area map**

The current staffing level of EMS providers for NRS is listed below. According to the Chief Operating Officer there are six full time staff and the balance are part-time (per diem) members. A single ambulance is staffed at the ALS level 24/7 and a second unit is staffed during peak volume daytime hours only.

	Paramedic	Advanced EMT	EMT	EMR	Total
Full Time	4	1	1	0	6
Part Time	1	0	2	0	3
Per- Diem	4	5	4	2	15
Total	9	6	7	2.	24

**Figure 4 - Current EMS Staffing Level**

An important part of any study of this nature is study of the statistics on the workload of the given service. For this study the team reviewed the call or incident volume that NRS has responded to in the calendar years of 2019, 2020 and for part of 2021 (thru September 25). Consistently the Town of Manchester had the highest call volume with Dorset in second place. It should be noted that all incident volume, response times, and other response information was provided through the Manchester Public Safety Dispatch Center. This center dispatches NRS for the entire five community region.

A review of incident volume reveals that NRS responded to 1,316 incidents in 2019, 1,151 in 2020, and is projected to respond to approximately 1,450 incidents in 2021. It is worth noting that most EMS services experienced a decrease in volume based on the pandemic in 2020. As the pandemic has persisted, the data in Figure 5 and our experience indicates

an increasing service demand will develop. The projected NRS 2021 service volume reflects a 20.5% increase over 2020 and a 5% increase when compared to the 2019 figures. As this trend is likely to continue, we would project the 2022 volume to be approximately 1,500 calls per year.

However, a call for service does not always result in the transport of a patient. Approximately 30% of the volume discussed above are situations where the patient is not transported to a hospital. Currently patients that are not transported do not generate a bill for service. Our experience in other similar regions indicates that the volume of calls that do not result in the transport of a patient are above normal.

	2019			2020			2021 thru 9/25	
Manchester	893	68%		770	67%		663	66%
Dorset	204	16%		200	17%		194	19%
Danby	91	7%		83	7%		57	6%
Mount Tabor	20	2%		19	2%		19	2%
Winhall	19	1%		9	1%		13	1%
Mutual aid	89	7%		70	6%		64	6%
	1,316			1,151			1,010	

**Figure 5 - Response numbers by Community and Year**

An evaluation of the incident volume by the time of year and the day of the week are consistent with what the team typically sees in many other systems that have been studied. The statistics indicate that the volume of calls by month and day of the week justify a consistent level of service be provided year round. However, based on when the time of day the calls are taking place, there is a consistent need for an increase in some type of coverage or response between 8:00 AM and 4:00 PM. This also is very typical and is often reflective of an aging population as well as when most people are mobile.

While the volume indicates the need for more than a single unit, Figure 8 indicates the average number of daytime calls is 1.68 incidents per day (08:00- 17:00). Clearly there are times, such as when of motor vehicle crash results in multiple injuries or when incidents overlap, that more than a single unit is needed in the region. However, the incident volume, combined with the rapid turnaround that occurs when a patient is not transported, results in less than 1/3 of the 18 hours of coverage being utilized for incident response. Our team believes that there is an opportunity to refocus the remaining shift time, and create a new level of community involvement and engagement that is currently missing.

Incidents by Month	2019	2020	2021
January	72	109	98
February	44	105	83
March	60	88	101
April	60	55	110
May	81	94	112
June	78	95	115
July	87	94	142
August	81	100	131
September	93	102	115
October	86	124	N/A
November	69	94	N/A
December	75	91	N/A

*Note: 2021 numbers are from 1/1 TO 9/25*

**Figure 6 - Incident Volume by year and Month**

Incidents by Day	2019	2020	2021
Sunday	13.0%	12.4%	13.3%
Monday	13.4%	16.2%	14.7%
Tuesday	13.5%	14.8%	15.6%
Wednesday	16.6%	14.8%	14.1%
Thursday	14.5%	14.7%	14.1%
Friday	14.6%	13.3%	15.7%
Saturday	14.4%	13.8%	12.5%

*Note: 2021 numbers are from 1/1 TO 9/25*

**Figure 7 - Response Percentage by Year and day of the Week**

Incidents by Time of day	2019	2020	2021
0000 to 0459	120	98	104
0500 to 0759	125	103	92
<b>0800 to 1159</b>	<b>325</b>	<b>296</b>	<b>223</b>
<b>1200 to 1659</b>	<b>289</b>	<b>273</b>	<b>266</b>
1700 to 1959	282	214	168
2000 to 2359	183	167	154
<i>Peak Hours – 1.68 calls per day</i> <i>Note: 2021 numbers are from 1/1 TO 9/25</i>			

**Figure 8 Response by year and time of day**

When a medical emergency occurs in Manchester, the Manchester Police Department (MPD) and NRS are notified to respond. A police officer is often first on the scene. The Manchester Fire Department (MFD) is also available to provide rescue services or, in critical situations, provide the personnel to develop the appropriate response to critical or complex situations. We found both the MPD and MFD to be well trained and well equipped capable responders, focused on meeting the growing needs of the community. Effective July 1, 2017, MPD is required to be first aid, AED, and CPR trained in order to provide care. This was done in part due to elongated NRS response times.

An important aspect to be reviewed is the time it takes to reach the patient and provide prehospital care. In general, this response time is calculated from the time the 911 call is placed, to the arrival of the ambulance on the incident scene. In Manchester times are tracked from the time that the 911 call is relayed to the Manchester Public Safety Dispatch Center.

For this study, the data was provided by the Manchester Dispatch Center and reflects the time the unit is dispatched (toned) until the ambulance has arrived on the incident scene. The Standard used in this study, the Commission on Accreditation of Ambulance Services (CAAS) Section 201.05.02, which states that in life threatening requests for service, the time from call to the ambulance arriving on scene shall be 8 minutes and 59 seconds, 90 percent of the time. The response times provided by the Manchester Dispatch Center

indicate that NRS response times are well above the CAAS standard and abnormally high based on both industry best practice and our experience in similar communities.

### **201.05.02 Response Time Standards**

*The agency shall have established standards for the following time intervals: total time to process a request prior to it being assigned to an ambulance; total time for an ambulance to start responding once notified of a request; total response time (defined as the difference in time from the point where the location of the patient, the call-back number, and the problem type are known--if possible--until the time when an appropriate responding crew advises that they have arrived at the scene.) These time intervals will be defined for life-threatening, emergency, and non-emergency requests. Differences in response time standards by geographic area will be described. In life-threatening requests, the default, total response time standard will be eight minutes and fifty-nine seconds, 90% of the time unless the Medical Director and the oversight agency have established a different system standard is appropriate due to system design.*

**Figure 9 - CAAS Response Time Standard**

The project team finds that considering that an ambulance is fully staffed in the station on a 24/7 basis, the response times for NRS are above average for the Town of Manchester considering the size of the community, location of the station, and the position of the incident cluster. Our team believes that several actions could be taken to reduce response times. Actions that should be considered include improving crew notification through pre alerting, monitoring of turnout time (time from tone until the unit is responding - typically one minute), and the posting of the second unit closer to incidents based on observed history or the presence of community events.





full copy of the 2015 report reflecting the EMS portion of the study is attached in Appendix A of this document.

## **VIII. Current Observations, Findings and Illustrative Examples**

The team has reviewed and documented at least 20 observations and findings as part of this project. The points detailed below are not presented in any order as we felt they are all important and clearly indicate that change is needed. **Although it is not our intent to create conflict or create a level of embarrassment or increase level of liability, we have been asked to include pertinent examples of service level issues that led to our observations and findings.**

***1. NRS has a deep-rooted culture that is focused on the employee and NRS and not the Town of Manchester as the largest customer (66-70% of volume).*** The project team has been told of many instances that reflect this statement.

- The Manchester Public Safety Dispatch Center asked for guidance on creating a response, “Run card” for Manchester and all communities that NRS responds to listing the mutual aid services in order of preferred response. There was no reply and therefore no guidance given.
- A soccer tournament held on June 19/20, 2021 with 75 teams and more than 2,000 people serves as an example of concern. As with any event of this size it is common for the town to have all departments conduct a collaborative emergency planning meeting to outline response to potential events. This includes developing an multi agency incident action plan (IAP) as well as to have resources in the ready state should they be needed. At the event at least one potentially serious injury occurred and there was a long delay in an ambulance arriving on the scene as well as the transport of the patient. Despite notice being given, NRS was staffed by a single crew during the shift. (Normally 2 crews are on staff at the time of this incident). Considering that several days’ notice was given, NRS was briefed in detail by Town Officials and event organizers. This represents a dramatic lack of situational awareness and negligence on the part of NRS staff. NRS was notified of this event on June 1, 2021.
- NRS did not respond to other event planning requests as documented through multiple e-mails. As an example, there was no response to a November 2017 tournament notification.

- At the meeting a with the Board of Directors and the MRI review staff, it was discovered that NRS would only participate in meetings that would be for all towns they serve and not a single town or planning for a single event in a town. Clearly not a response that was expected by the review team and clearly does not reflect well in any planning in any of the towns regarding EMS needs especially with Manchester having almost 70% of the usage (incident volume).

***2. Despite requests, NRS has not substantively participated in any pandemic related planning with the Town of Manchester.***

- With the start of the COVID-19 almost two years ago, the Town of Manchester scheduled a meeting on March 9,2020 of all key department heads with jurisdiction over a response both town and public based. All 19 invitees attended except NRS. An essential element of this pandemic planning process was the involvement of EMS, who in most cities and towns, were viewed as a key participant in the decision making associated with a community's response. Although NRS was asked to participate there was no response. When the NRS Board of Directors was questioned on this lack of participation, they responded that they would not participate unless all five communities were represented. Fortunately for Manchester, the Towns Deputy Health Officer is a licensed physician and was able to provide information and medical guidance.
- The Manchester Public Safety Dispatch Center asked NRS for guidance on what they should be asking callers for an EMS response regarding COVID and how they wished this to be relayed to the responders. There was no response and therefore no guidance given.

***3. Town Public Safety Departments and the Town Manager indicated that there was a lack of integration, coordination and training with NRS.***

- Interviews with Manchester Public Safety Command Staff identified that a lack of integration, coordination and training between Manchester Police, Fire and Dispatch exists to the extent that there are issues coordinating operations. Without robust EMS participation in meetings where incident action plans are developed to guide response, interagency coordination is diminished. As noted above, this encompasses planning for the response to public health situations such as the Covid 19 pandemic. The lack of participation by NRS creates a huge void in Manchester's operational planning efforts and increases the risk profile of the community.
- During the review and interview process, it was also noted that a crew had a lack of respect and very unprofessional behavior with a medical physician and staff in front of the patient. This resulted in not only a very uncomfortable situation for the medical staff and the patient but also questioned the future request for EMS

services to transport from the facility in the future. (please refer to item 16 below).

It was stated at the meeting with the NRS Board of Directors and the MRI review team that the Manchester Town Manager was a problem for them and that they would only meet with the Selectboard. In addition, the Town Manager had requested documentation for this study that was not provided in a timely fashion and was only partially provided very late in the process. It is inappropriate for NRS to work around or withhold communication from the Town Manager.

***4. Interviews revealed a perceived lack of NRS Involvement within the community (Manchester).***

***5. Members of the Board of Directors indicated that Manchester is one fifth of the communities served and all deserve equal consideration.***

***6. Members of the Board indicated that NRS would not participate in community specific events unless all member communities benefited.***

- As stated earlier the NRS Board of Directors takes the position that it will not be involved in any discussion or needs of any single community as it serves a region of five towns. In this case, Manchester is not only the largest user but also the largest financial supporter (70%) of the program. In addition, Manchester hosts the largest and most events in the area and clearly has unique prehospital care and public health needs. In spite of these differences, Manchester was viewed by the representatives of the NRS Board of Directors as being entitled to equal time and resources as the other four communities. The project team found this position atypical and very troubling. EMS in any community is as important as Fire and Police in the planning and response to events.
- Both the Town Manager and the review team submitted different requests at different times for information and statistics from NRS to inform this study. At a very contentious meeting with two members of the NRS Board of Directors and the project team, the board members had agreed to provide an operational manual and other information that as of the writing of this document has not been provided.
- It should be noted that during the nearly 90 minute interview (conducted on October 6, 2021) with the NRS Board of Directors and the project team, we felt that the Board should hear the interview themes and concerns regarding the actions and management of the EMS team. The hope was that hearing the information from an independent group would encourage the Board to listen to

the issues the comments, and potentially take some positive action to engage the Town and resolve these issues. The meeting went from being friendly to very defensive and became non-productive.

***7. Lack of substantive consideration of 2015 recommendations.***

- As part of the review of the current operation of prehospital care and risk assessment, the EMS section of the 2015 study conducted by our firm was reviewed. It was found that none of the recommendations had been substantively considered or acted upon. This lack of implementation has had a direct financial impact on the current conditions and level of financial support needed by member towns. The 2015 study is attached in **Appendix A** of this document. One of the main recommendations that was not addressed was that of revenue. It was recommended at that time that not only the rates be adjusted, but also the rate for collections being paid to the billing company at 11% be either negotiated or rebid. It is normal to see 4-6% range of collections. This alone has cost the towns more in funding over the years.

***8. The lack of a sense of urgency/rapid response to calls was noted as a universal interview theme and operational concern.***

- The project team heard a universal interview theme that there is often a lack of urgency when responding to a call for service. Some of the incidents range from a slow response out of the building and stopping to talk to others, to having a single crew in service and responding to a low acuity call (a lift assist) and not diverting to a more serious, cardiac call. In fact in this particular case, NRS never went to the most serious call and had a mutual aid service handle.
- Manchester Fire and Police Chiefs indicated that they regularly receive customer service complaints as people often think EMS is provided by the Town. The central theme of the complaints received was elongated response times.
- An independent review of data provided by the Manchester Dispatch Center (which does not include all call processing time) found that the average response time in Manchester was well above the CAAS Standard and based on the experience of our team was excessive given the deployment of a 24/7 staffed unit at a central location within a 42 square mile community.
- As mentioned above, in the project team's discussion with town officials it was brought up several times that they regularly received verbal complaints and

concerns about the response of NRS from Manchester residents. We believe that most of the comments did not reflect direct patient care but more on attitude, slow response, and cultural issues.

**9. Manchester has the highest call volume and pays 68.5% of increasing fees (\$190,969 offset by rent) (49.9% of population served).**

**10. There is no communication between the Manchester representative on the NRS Board and Selectboard or Town Manager. This is atypical.**

**11. Interviews revealed a consistent theme that NRS is largely unresponsive to Manchester's needs and requests which are far greater than the other communities served.**

- With Manchester being the largest customer in terms of population, incidents, and finances, we believe that the unique aspects of the community require a responsive and respectful approach. In addition, Manchester serves as home base and provides (for a fee) dispatch, living, training and apparatus space the provides the opportunity for an enhanced level of community involvement. Utilizing our lens of experience, we have never seen an EMS provider not be considerate of a community's unique needs especially when the community is the largest stakeholder. **We find the lack of responsiveness and defensive posture to be atypical and perplexing.**
- Considering many of the documented points outlined above and interviews with both Manchester officials and representatives of the NRS Board of Directors, we believe that a cultural theme exists where Manchester shares same level of input as the smallest community in the program. This is atypical and we find that NRS is largely unresponsive to Manchester's needs and requests.
- Although a Member of the NRS Board of Directors lives in Manchester there is no communication or relationship with that person. In fact, neither the Selectboard or the Town Manager were aware of who the representative was. This indicates both a lack of communication and representation.

***12. Members of the Select Board indicated that cost is a driving factor in future decisions.***

**13. Members of the Select Board indicated a willingness to explore an overall community and public health partnership to reduce cost, enhance and optimize service.**

During our time with town officials, the project team heard the following comments and concerns that will all be addressed in the upcoming material in this document.

- Members of the Selectboard indicated a concern for Town finances and indicated that cost and quality of life would be driving factors in any decision relative to selection of a prehospital patient care provider.
- Members of the Selectboard indicated a need to address the issues at hand and indicated that they would consider industry best practice and development of mutually beneficial partnerships to reduce cost, enhance and optimize service.

**14. The revenue stream is not optimized (towns pick up the remainder, and Manchester picks up the majority of that balance).**

At the time of the 2015 study there was a question of NRS fiscal sustainability.

- The NRS Board has done a good job increasing the level of subscriptions/donations thus creating a more favorable fiscal position.
- NRS is currently paying 11% for collection of ambulance revenue. This was pointed out in our 2015 report as excessive and atypical. However, this practice continues to exist with the same vendor and a bid to evaluate rates and options was never issued.
- We contacted multiple vendors that indicated the 11% rate was far outside the norm and one vendor stated, “that is absolutely crazy”. All vendors that we contacted indicated that they would charge significantly less.
- One vendor provided us with a quote of 5%.
- If the MRS/NRS Board had acted on this recommendation in 2015, approximately \$120,000 (approximately \$84,000 to Manchester) would have been saved over the ensuing years. Ultimately the cost of this inaction was passed onto participating communities, with Manchester absorbing the largest share.
- The rates charged for ambulance transportation and patient care services have not been regularly adjusted to optimize the revenue stream. The current rates are well below what each of the two vendors we contacted would recommend. While this does not translate dollar for dollar, adjusting rates would have increased revenue thus deferring expenses passed onto the communities.

**15. There is excessive downtime based on call volume. This could have been filled with community wellness/pandemic response events.**

- Currently there are two crews on during peak daytime hours. In total this provides 18 hours of coverage (9 daytime hours per unit).
- Based on volume this translates into a workload of 1.68 calls for service per day (8AM to 6PM).
- Approximately 30% of calls received are non-transports and the units are typically quickly returned to service.
- On average crews are occupied on approximately 33% of their respective shifts.
- The crew time that is not occupied by response provides a tremendous opportunity for enhanced community interaction and the development of a variety of additional community paramedicine services(blood pressure checks, Covid testing, wellness checks etc.)

**16. Customer service and attitude issues have been documented by public safety officials and health care providers in Manchester.**

- Multiple health care providers in Manchester indicated that they were reluctant to call NRS for patient transport based on the attitude often experienced when crews arrive.
- One situation was recounted where a crew member initiated a debate with a treating physician relative to the need for emergency transport and further questioned why the patient could not walk to the ambulance.
- Please refer to item 3 listed above.

**17. Despite being the largest stakeholder Manchester has little power to effect change as the NRS Board indicated that all Towns are equal.**

- Please refer to items 4-6 above.

**18. The Covid 19 Pandemic has strained resources and produced an increasing service demand.**



**19. Pandemic planning lacks EMS involvement which has expanded the risk profile of the community.**

- As the pandemic persists, public health programs are facing an unprecedented demand for services.
- Manchester has a higher-than-average risk based on tourism, population and serving as the regional hub for many events with a focus on sports. Failure of NRS to participate in pandemic planning has contributed to a higher risk profile in the community.
- The project team believes that the requests put forth for NRS to participate in pandemic response planning were a missed opportunity to serve the community and increase the level of community involvement/interaction.
- We are not aware of any other community where EMS services have not participated in pandemic response and planning efforts. In fact, EMS has led these emergency management-based efforts in several communities.
- Incident response volume is expected to crest 1,500 calls for service in 2022. Much of this increase in service demand is based on the pandemic.

**20. Response times are excessive considering a staffed unit is based in Manchester and often exceed CAAS Standards.**

- Please refer to item 8, bullet 3.

**IX. The Future**

After an extensive review of the current EMS system in Manchester the team from MRI has produced several options listing both advantages and disadvantages as well as when available cost factors. In order to properly discuss the cost of programs it is equally important to take a look at the revenue side as well. The revenue may be derived from many sources and methods. To begin with a reasonable fee structure must be in place to bill for services provided. Newer rates as recommended by the ambulance billing firm selected should be utilized.

A critical factor required to optimize the revenue stream includes proper billing and collections. The project team made contact with two billing companies and found collection rates from 4% to 6% of all collected billing fees to be a normal range. In fact,

one company provided a quote of 5% of the revenue collected. It is our experience that once a company is selected and a positive relationship established rates could be negotiated to a lower percentage in exchange for a five-year contract.

As part of the development of this program the Town will need to approve billing rates, a billing policy as well as a collection policy.

We developed four potential options for the Town to consider for the future structure and organization of EMS services. The first option would be to go out to bid for a third-party private service. After reviewing the potential companies and considering the call volume, we do not believe this is a viable option as few if any companies would potentially bid and stipends costs would be significantly higher than what the Town current pays. The other three options are each discussed in detail and list advantages, disadvantages.

## **X. Option One – Status Quo**

This option is to remain with the current program with NRS and focus on strengthening communication. This concept would include the following aspects:

- Customer Service - Management change would be essential
- Negotiate that NRS be more actively involved in the Manchester events and operational planning.
- Negotiate that NRS must take an active seat at the table representing EMS in Emergency Management meetings.
- Require an understanding of the issues from Manchester's perspective and a strong internal commitment to change.
- Require a better relationship with the Town government (administrative and public safety departments).

This option would require the least amount of work and will not create the friction that typically results from a change. The Town will not need to create a new department or hire additional employees. The current subscription plan that NRS has now will remain in place and finally the cost for the next year is known.

There are several disadvantages to this option with the obvious being many of the same issues and concerns are likely to persist. In addition, Manchester will have minimal or no control or additional input into the management of the program unless the structure of governance is substantially revised. Also, it is likely that there will be no improvement in

Manchester is specific involvement unless that is addressed through negotiations and a new contract is developed. Finally, it is unlikely that the revenue stream will be optimized leaving the communities to pick up a larger share of the operating costs. Although we hope that this is not the case, our team believes it is important to note that the relationships will likely be strained after the release of this report which may make positive changes difficult.

## **XI. Option Two – Transition to a Municipal EMS**

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The development of a municipal EMS system is the costliest option for the Town of Manchester and would require a solid transition plan and implementation team. It would require the Town to create a new department and to hire employees. A license to operate will need to be obtained from the State, and other ambulance and equipment will need to be acquired for operations. Obtaining a license may be a complex process as some in the EMS community may have an allegiance to NRS.

Advantages of this operational concept include development of a system where the Town of Manchester has full control over operations. This new level of oversight will allow for service level decisions to be implemented and facilitate an increased level of public health and pandemic risk reduction. Utilizing this concept of operations, the Town will receive all revenue from transports and can accept donations for equipment. After an initial set up and evaluation period, the Town will have the option to look at offering additional services and increase public safety integration through joint training with fire, and law enforcement. These efforts will enhance response coordination and the service level provided to the community.

Other key advantages to this program are that it will create a community focused culture and enhance community engagement. This program concept has the potential to elevate the level of service while at the same time, reducing the current internal and external concerns. Finally, this program will allow for the development of community outreach and pandemic services, and redeploys the EMS budget with a Manchester focus.

By being a public municipal department the current municipal services (payroll, finance, human resources, accounts payable, legal counsel and infrastructure) can be harnessed to increase program efficiency. The development of this program would cost just over \$500,000 in startup costs.

The disadvantages of this option include the need to hire new employees and create and manage an additional budget. As with any service directly provided by a municipality, there is an increased increasing injury profile based on the high-risk nature of public safety and emergency response functions. The development of this option and will no doubt create some level of uncertainty with the other towns NRS currently serves.

As this operational concept is developed, it would operate in a similar staffing/deployment model to that currently in place during the first year. NRS currently has one dedicated ALS response and transport crew 24/7. A second person or team would operate during the peak hours (day time). There are a few operational considerations that will need to be decided prior to going live to decide how to efficiently and effectively utilize the second crew.

This option will require an extensive cooperative effort be made for a service to be operational by July 2022. Protocols and procedures for operations as well as billing and collections policies will need to be developed and in place. If this option was to be chosen and NRS cannot continue to operate, all current NRS employees should be invited to apply for positions within the new structure. In doing so, these new municipal employees will receive a pay increase and work within a modernized organizational structure. It is our hope that the personnel hired would develop into a team that will foster collaboration and focus on the residents served. As this team is developed it is equally important that employees have a feeling of being a valued and recognized for delivering an excellent community focused service.

If this option was selected the project team strongly recommends that if NRS is not able to continue to provide service that all communities currently served would be invited to transition into the new system. This position has already been endorsed by the Chairman of the Selectboard and Town Manager.

## **XII. Option Two Plus – Option Two with Healthcare Partners**

This option will have the same features as Option Two but will allow for collaboration with other health resources. It is anticipated that this option would have some benefits in cost sharing and lower the overall town expense. One of the key advantages of this concept would be the potential to have constant skill training especially on critical skills not often used in the field.

This option has many advantages to add to Option Two, several of these points are listed below:

- Option Two Plus would increase the ability to provide mobile outreach services,
- The program would increase the ability to provide well-coordinated and communicated Covid testing and vaccination.
- The program would provide the potential to benefit from a joint purchasing program for equipment and dispensable items. This would reduce cost by creating a larger economy of scale.
- The program would provide a tax deductible opportunity to fundraise and obtain donations. The program would allow for a stronger relationship between first responders and health care professionals.
- The program would promote a cooperative effort in quality assurance and quality improvement (QA/QI) efforts by having built in skills training and review on an as needed basis.

Like any new program that involves outside agencies, this option will require the development of a memorandum of agreement (MOA), memorandum of understanding (MOU) or some sort of contract with the partners. There will also be a need to communicate to the public that this program is a municipal department that is supported and optimized by a partnership. It is important to note that this system could transition to a full municipal system (Option Two) should a mutual beneficial relationship not develop between the partners.

### **XIII. Fiscal Impact**

Each of the options will have a financial impact on the community. The MRI team has developed an experience based financial projection option. This projection should be utilized to assist the Town with determining what option would be the best for the Town of Manchester.

#### **OPTION 1 – STATUS QUO**

Current and future budgets are developed by the NRS Board. The costs have been rapidly increasing with minimal changes to the revenue stream.

FY 22 - \$183,819.00

FY 23 - \$190,969.00

**Note: Manchester receives approximately \$127,635 in reimbursements for fixed costs (utilities, dispatch, and rent) under this option. .**

## **OPTION 2 – Transition to a Municipal EMS system**

### **OPTION 2 PLUS – Option 2 with a Healthcare partner(s) (Same costs to start and operate)**

Options 2 and 2Plus have the same cost components that have been broken into two distinct sections as detailed in figures 11 and 12 below. Figure 11 details anticipated startup cost that can be paid using ARPA funding. Figure 12 provides an overview of operational costs using current wage rates for the first two years of the program.

#### **Startup costs: \$ 502,500.00**

Program development: \$92,500.00  
Ambulances (10 year life expectancy- \$120,000.00)  
    Order 1 new and purchase 1 used, 2 delivery on new one  
    Replace one unit every 5 years using a lease in arrears strategy  
Operational Equipment (5 to 10 year life span) \$250,000.00  
Communications: \$20,000.00  
Initial drug and dispensable items: \$ 20,000.00

**Figure 11 - Startup Costs**

Below is a summary of budget expenses

**Operational Costs: Year 1-2 \$999,616.00 - Year 3-8 \$1,069,516.00**FTE staffing ( 8 people)  
\$447,283.00  
Per diem staffing (8 people) \$186,368.00  
Benefit Costs (40%) \$ 190,115.00  
Overtime \$28,000.00  
Ambulance Billing Company (5%) 39,500.00  
Ambulance Lease in Arrears \$69,900.00 (annually in years 3-8)  
Insurance \$ 7,500.00  
Misc. \$ 5,000.00  
Supplies \$ 20,000.00  
Fuel \$ 25,000.00  
Vehicle Repairs \$ 10,000.00  
Uniforms \$ 18,000.00  
Training \$ 12,800.00  
Communications \$ 10,000.00

**Figure 12 - Operational Costs**

	Option 1	Option 2	Option 2 Plus
Expense	\$ 190,969	\$ 999,616	\$ 999,616
Revenue	\$ 127,635	\$ 920,627	\$ 1,013,447
Expected Operational Cost	\$ 63,334	Cost Change – increase (\$15,655) or cost neutral subject to revenue stream.	Cost Decrease - \$ 13,831 positive cash flow. \$77,165 cost decrease subject to revenue stream.

**Figure 13 - Cost Comparison**

It should be noted that Manchester receives approximately \$127, 635.00 in reimbursements for fixed costs (utilities, dispatch, rent etc.. that will no longer be paid to the town. Under option one the costs will continue to increase with minimal ability to control the increase.

#### **XIV. Conclusion and Recommendation**

As external practitioners, the project team has no stake in the outcome. Considering the data provided and the themes unveiled through candid interviews with Manchester Public Safety Personnel, we believe that Manchester is not being served well by the current configuration and that an opportunity to enhance prehospital services provided to Manchester exists. The issues currently in place coupled with the ability to use ARPA funding combine into a unique opportunity to change program structure.

We recommend that the Town pursue Option 2 Plus. This option allows for the Town to start its own EMS System and have full control over all the aspects of its operation. The concept of working collaboratively with a Healthcare partner offers many benefits for both participants. If in the future the Healthcare partner or the Town determines that the partnership no longer works, the EMS system would revert to a municipal foundation and continue to operate without disruption. If this should occur the revenue stream and expenses will need to be reviewed and operations may need to be potentially adjusted.

## **APPENDIX A**

### **2015 FINAL REPORT**

#### **Manchester Dorset**

#### **Public Safety Collaboration Study**

### **Chapter II Manchester Rescue Squad**



## **II. MANCHESTER RESCUE SQUAD**

Emergency Medical Services (EMS) operations are an important component of the comprehensive emergency services delivery system in any community. Together with the delivery of police and fire services, it forms the backbone of the community's overall public safety life net. In fact, as a percentage of overall incidents responded to, it could be argued that EMS incidents constitute the greatest number of "true" emergencies, where intervention by trained personnel does truly make a difference, sometimes literally between life and death.

The Manchester Rescue Squad (MRS) was organized in 1964. Like many rescue squads from that era, the personnel possessed basic first aid training and were primarily concerned with getting the patient to the nearest hospital. Over the years, the system has evolved into a full-fledged emergency medical services provider, first at the basic life support (BLS) level and since August 2000 at the advanced life support (ALS) level utilizing paramedics. In addition to Manchester, the squad provides EMS to 5 additional towns in the Northshire region covering 219.2 square miles: Danby, Dorset, Mt. Tabor, Rupert (partial non 9-1-1 coverage) and Winhall (partial coverage). Manchester Rescue Squad was honored as Vermont's State Ambulance Service of the Year in 1989 and 1999.

Although it is headquartered in the Manchester public safety building, unlike the police and fire departments, the rescue squad is an independent non-profit organization, not a municipal department or operation. The service is governed by a 7 member volunteer board of directors which is responsible for financial oversight, fundraising and public and town relations.

At the time of this assessment, the Manchester Rescue Squad had a total of 36 members on the roster. This includes 5 full time personnel one of whom functions as the chief operating officer (COO) responsible for managing daily operations of the squad such as staffing and scheduling, medical equipment, supplies and vehicles. The COO reports directly to the board. All of the full-time personnel are paramedics with 2 of them holding advanced certification as critical care paramedics. In addition, 25 per-diem personnel and 6 volunteers fill out the membership. Per-diem and volunteer personnel possess one of five different certifications:

- Emergency Medical Responder (EMR)
- Emergency Medical Technician (EMT)
- Advanced Emergency Medical Technician (AEMT)
- Paramedic (EMT-P)
- Critical Care Paramedic.

It is important to note that as currently configured the rescue squad is slanted heavily toward compensated staff. It lacks the volunteer base of most similar agencies. The squad staffs 1 ambulance 24/7/365. Personnel staffing this unit are divided into two work shifts: 6:00 AM to 6:00 PM and 6:00 PM to 6:00 AM. A second unit is staffed daily from 9:00 AM to 6:00 PM which is the time of day with the highest number of incidents. Although they strive to have at least one EMT-P on duty at all times, minimum certification requirements for staffing include 1 EMT and 1 AEMT. This exceeds the state minimum requirements of 1 EMR and 1 EMT.

As previously noted the rescue squad operates from the Manchester public safety building. The town leases the squad about 5,600 feet of space in the building as part of a 5 year lease that was signed in October 2012. The lease calls for rent of \$10.00 per square foot per year and includes an annual assessment for dispatch services valued at \$140,000.00 increasing to \$150,000.00 by the end of the lease. However, the town waives the majority of the rent payments in exchange for the service the squad provides to Manchester in recognition of the associated in kind services. The town also reduced its direct financial support from \$10,000.00 annually to \$0 over a 3 year period. In reality, MRS pays the town \$3,600.00 annually for grounds and other maintenance and 1/3 of the cost for water and heat in the building in addition to 100% of the electricity they use. The current lease with the town expires on June 30, 2017.

The Manchester Rescue Squad operates 3 fully equipped ALS capable ambulances and a first responder vehicle. The current equipment is in relatively good condition despite the fact that two of the three ambulances are at least 10 years old and have over 100,000 miles on them. The squad would like to try to replace 1 ambulance about every 3 years and keep their ambulances on a 10 year replacement plan but that is not always possible due to funding considerations. This challenge is illustrated by the fact the newest current vehicle in the fleet is at least 5 years old and probably nearing 100,000 miles.

The following summarizes the Manchester Rescue Squad fleet:

- 2009 Ford E-450 Diesel Osage 4 wheel drive ambulance with 72,000 + miles.
- 2005 Ford E-450 Diesel Demers ambulance with 112,400+ miles.
- 2004 Ford E-450 Diesel Osage ambulance with 158,900+ miles.
- A new ambulance was delivered in February 2015 while this report was being prepared. Once it is placed in service the 2004 unit will be taken out of service. This unit was purchased through a cooperative

agreement with Manchester which will be discussed later in this chapter.

- 2011 Chevrolet Tahoe gas first responder vehicle with 3,700 miles. **As previously noted this unit was donated by a resident of Dorset to be used for first response in/to Dorset.** MRS rarely uses the vehicle as it makes its responses in an ambulance. The MRI study team believes that the lack of use of this vehicle for its intended purpose illustrates a culture within the organization that stifles volunteerism. We believe this culture manifests itself at least partially in the high number of full time and part time personnel “employed” by MRS with a corresponding extremely small volunteer base when compared to any of the peer communities.

The Manchester Rescue Squad responds to between 1,100 and 1,200 emergency incidents per year. In 2013, the only year for which full statistics were provided, there were a total of 1,214 requests for service of which 1,173 were emergency responses. This equates to an average of 22.6 emergency responses per week and 3.2 per day. This is not a particularly high volume particularly for an EMS agency that serves 6 communities.

### MANCHESTER RESCUE SQUAD RESPONSES BY TYPE - 2013

TYPE OF CALL	NUMBER
Emergency Incidents	1,173
ALS Intercepts	7
Inter-facility Transfers	3
Medical Transports	7
Mutual Aid	17
Standby	5
<b>TOTAL</b>	<b>1,214</b>

Source: Manchester Rescue Squad Presentation

### MANCHESTER RESCUE SQUAD RESPONSES BY TOWN - 2013

<b>CALLS BY TOWN</b>	<b>NUMBER</b>	<b>PERCENTAGE</b>
<b>Manchester</b>	<b>844</b>	<b>69.5%</b>
<b>Dorset</b>	<b>204</b>	<b>16.8%</b>
<b>Danby</b>	<b>86</b>	<b>7.1%</b>
<b>Winhall</b>	<b>15</b>	<b>1.2%</b>
<b>Mt. Tabor</b>	<b>11</b>	<b>0.9%</b>
<b>Rupert</b>	<b>4</b>	<b>0.3%</b>
<b>Other Areas</b>	<b>50</b>	<b>4.2%</b>
<b>TOTAL</b>	<b>1,214</b>	<b>100%</b>

**Source: Manchester Rescue Squad Presentation**

Manchester Rescue Squad did not provide the MRI team with any additional information regarding their emergency response activity, response times, or NFPA 1710<sup>1</sup> and/or CAAS<sup>2</sup> compliance, etc. We believe that the squad probably achieves recommended response time targets in Manchester. However, in the Dorset area we would believe that response times are marginally compliant.

Most of the EMS training requirements are dictated by the State of Vermont or other licensing and/or certification authorities and involves initial training and education requirements necessary to obtain initial certification, as well as, continuing education requirements for recertification. These requirement can be fairly substantial from a time commitment standpoint (particularly for volunteer personnel) and are as follows:

- Emergency Medical Responder (EMR)
  - ✓ 45 hour initial course
  - ✓ 24 hours of continuing education every two year recertification cycle
- Emergency Medical Technician (EMT)
  - ✓ 150 hours didactic plus clinical requirements (usually taught over 6 months)
  - ✓ 72 hours of continuing education every two year recertification cycle
- Advanced Emergency Medical Technician (AEMT)

<sup>1</sup> NFPA 1720, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments*, 2010 edition (National Fire Protection Association, Quincy, MA), outlines organization and deployment of operations by career and primarily career (> 15% career) fire departments.

<sup>2</sup> The Commission on Accreditation of Ambulance Services (CAAS) is an independent commission that established a comprehensive series of standards for the ambulance service industry.

- ✓ EMT plus 150 additional hours of didactic and clinical requirements (usually taught over 6 months)
- ✓ 72 hours of continuing education every two year recertification cycle
- Paramedic
  - ✓ AEMT plus two-year college course involving didactic, hospital clinical time and ambulance clinical time
  - ✓ 72 hours of continuing education every two year recertification cycle
- Critical Care Paramedic
  - ✓ Paramedic plus 100+ hours of didactic and hospital clinical time
  - ✓ 36 hours of continuing education every two year recertification cycle (in addition to the 72 hours required for standard paramedic certification)

One of the catalysts for this study is the fact that the Manchester Rescue Squad is struggling both financially and also to maintain credible service levels within the communities that they serve. The crux of this problem is the rescue squad is experiencing significant difficulty in trying to raise sufficient funds to allow them to continue to operate. Continued decline in the rescue squad operations will result in a very large gap in the public safety service that is presently being provided.

The Manchester Rescue Squad only provided the MRI study team with limited budget and financial information consisting of very simplified (as opposed to detailed) revenue and expense breakdowns and only for a single year. However, based upon the information provided it appears that the squad's 2013/2014 budget was \$715,900.00.

### **MANCHESTER RESCUE SQUAD INCOME BY CATEGORY – 2013/2014**

REVENUE SOURCE	AMOUNT
Medical Receipts	\$522,500.00
Fundraising	\$ 82,750.00
Subscriptions	\$ 75,000.00
Municipal Funding	\$ 32,650.00
Classes and Ambulance Coverage	\$ 3,000.00
<b>TOTAL</b>	<b>\$715,900.00</b>

Source: Manchester Rescue Squad Presentation

## MANCHESTER RESCUE SQUAD EXPENSES BY CATEGORY – 2013/2014

EXPENSES	AMOUNT
Payroll and Benefits	\$398,750.00
Professional Services	\$ 88,900.00
Insurance	\$ 80,000.00
Medical Equipment and Supplies	\$ 71,500.00
Vehicles Repairs and Maintenance	\$ 35,000.00
Utilities and Building Maintenance	\$ 15,000.00
Other	\$ 26,700.00
<b>TOTAL</b>	<b>\$715,900.00</b>

Source: Manchester Rescue Squad Presentation

While the tables above provided by the Manchester Rescue Squad nominally illustrate a balanced budget, the fiscal reality is somewhat different. In fact, fiscal challenges are the most serious issue facing the squad at this point. The squad has been having difficulty generating sufficient funds to be able to pay for the overall operation of the service. This is in large part due to an overall trend of declining reimbursement rates coupled with rising labor costs resulting in fiscal operating deficits for each of the previous 3 years.

## EMS/RESCUE BUDGET COMPARISON

COMMUNITY	CURRENT EMS/RESCUE BUDGET
Ludlow, VT	\$355,275.00
Shelburne, VT	\$237,600.00
Stowe, VT	\$423,426.00
<b>AVERAGE</b>	<b>\$338,767.00</b>
<b>Manchester Rescue Squad</b>	<b>\$884,100.00</b>

Manchester Rescue Squad's annual operating budget is very high in comparison to its peer communities. As the table above illustrates Manchester's budget is \$545,333.00 higher, or, 2.6 times (+161%) the average peer communities. Even in comparison with the highest budget of the comparable communities Manchester's budget is still more than double. While some portion of Manchester Rescue's higher operating expenses may be attributed to the fact that the other entities are mostly all municipally operated services where certain cost associated with their operations may appear in other town line items

rather than the rescue squad's that cannot nearly justify all of this disparity and it is our opinion that Manchester's budget is still excessive.

A comparison of the staffing make-up of the comparable communities provides a clear picture of one reason why Manchester's budget is so much higher than its peers.

### EMS/RESCUE STAFFING MODEL COMPARISON

COMMUNITY	NUMBER OF INCIDENTS 2013	NUMBER OF FULL TIME EMPLOYEES	NUMBER OF PART TIME EMPLOYEES	NUMBER OF VOLUNTEERS
Ludlow, VT	707	1	4	17
Shelburne, VT	865	1	10	42
Stowe, VT	648	3	7	25
AVERAGE	740	1.7	7	28
Manchester Rescue Squad	1,174	5	23	5

Although Manchester Rescue Squad does respond to about 59% more incidents than average, the number of full and part time employees are proportionally much higher than average while the number of volunteers is less than 20% of average.

As with most EMS providers today, the majority of MRS revenue is derived from 3<sup>rd</sup> party billing of insurance companies. MRS's revenue sources indicate that about 73% of their income is derived from these reimbursements. However, Medicaid and Medicare which are responsible for a large percentage of these reimbursements is low in Vermont. Private insurance companies frequently utilize these rates to set their own reimbursement levels. In addition, billing is only permitted when a transport occurs. This results in more than 1 out of 3 calls (34%) being non-billable. So of 1,200 calls per year, only about 700 to 800 can be billed for. However, the MRI team was informed that they are now billing \$100.00 for responses to residences that do not result in a transport.

MRS uses a third party to administer their billing and collections. Their current provider is New England Ambulance Billing (NEAB) of Vergennes, VT. The company bills and then aggressively pursues payments from Medicare, Medicaid, private insurance companies

and the patients themselves. No percentage rate of actual collections was provided to the team. NEAB was previously charging a 15% commission on receipts collected. That commission is currently 11% which is reported to be lower than the Vermont average. However, based upon the previous experience of the study team this commission is actually excessive. Most commissions are in the 4% to 7% range, a fact borne out by the comparable community surveys which indicated the highest percentage paid was 8% with an average of 5%.

Manchester Rescue also offers residents of their service area a “subscription” program which they describe as an annual EMS “insurance” program. For \$95.00 per household, per year (August 1 – July 31) 100% of MRS expenses are covered for the subscriber household regardless of whether they have insurance or not. While MRS will still bill the patient’s insurance, deductibles and other non-covered expenses are absorbed by the squad, and ultimately written off, rather than billing the patient directly for any balance left. Subscriptions are solicited by a direct mailing to all postal patrons in the towns it serves.

As of January 2014, it was reported that the 2013/2014 subscription drive had:

SUBSCRIBERS	GROSS REVENUE	ADDITIONAL RELATED DONATIONS
810	\$76,950.00	\$21,814.00

Source: Manchester Rescue Squad Presentation

#### MANCHESTER RESCUE SQUAD SUBSCRIBERS BY TOWN – 2013/2014\*

TOWN	NUMBER OF SUBSCRIBERS	PERCENTAGE
Manchester	503	62.1%
Dorset	254	31.3%
Danby	39	4.8%
Winhall	7	0.9%
Rupert	4	0.4%
Mt. Tabor	3	0.4%

\*Thru January 2014

Source: Manchester Rescue Squad Presentation



For FY 2014/2015 the annual subscription was raised \$10.00 to \$105.00 annually. No final figures on FY 2013/2014 subscriptions, or, FY 2014/2015 memberships to date were provided to the MRI study team. NEAB previously also administered the MRS subscription program for a 7% fee on revenue collected. The program is now managed internally by squad members. It was reported to MRI that the squad has never attempted any type of business subscription and they would not be sure how to approach one.

An annual fundraising drive provides the squad's second largest source of revenue. This drive is conducted through mail with more than 3,000 letters personalized by members of the board and staff mailed out to residents of the various towns. Each year the fund drive usually focuses on a specific equipment need or project. In FY 2013/2014, the goal of \$70,000.00 was earmarked to pay off 3 heart rate monitors. As of January 2014, 334 donors had contributed \$66,029.00 towards this effort. On its website, the squad reports that it raised \$75,000.00, exceeding their goal by \$5,000.00. In FY 2014/2015, the fundraising goal is \$120,000.00. As of January 2015, 464 donors have contributed \$82,525.00 (68.7% of goal).

The final major source of revenue comes from funding provided by 5 of the towns serviced by the squad. Each town is assessed based upon the town's population as a percentage of the entire population served by MRS. The same type of financial arrangement has been proposed to help offset the cost of the new ambulance that has been ordered.

TOWN	POPULATION	NUMBER OF CALLS - 2013	ANNUAL FUNDING FOR MRS	NEW AMBULANCE FUNDING
Manchester	4,391	844	\$ 5,000.00*	\$20,000.00
Dorset	2,036	204	\$18,000.00	\$16,007.00
Danby	1,292	86	\$ 1,500.00	\$ 9,615.00
Winhall	702	15	\$ 1,500.00	\$ 2,889.00
Mt. Tabor	203	11	\$ 900.00	\$ 1,494.00
<b>TOTAL</b>	<b>8,624</b>	<b>1,160</b>	<b>\$26,900.00</b>	<b>\$50,005.00</b>

\*Per the current agreement, Manchester's annual funding to MRS is reduced to \$-0- for FY 2016. However, the town still provides the squad with over \$200,000.00 in kind services including dispatching and building rental. Source: Manchester Rescue Squad Website

The Manchester Rescue Squad is fully aware that it faces some significant challenges to its survival, both short and long term. Insurance payments from 3<sup>rd</sup> party bills are in a constant state of flux and primarily being reduced. The Vermont Health Exchange is experiencing significant operational problems and the full impacts of the Affordable Care Act are still largely unknown. Complicating matters further is the fact that in addition to the normal day-to-day operational needs of the organization a significant volunteer effort is required to manage the annual subscription and fund raising campaigns. The Squad has recently suggested that it may need to start assessing the Town of Manchester a stipend to be able to continue to provide service.

As has been previously noted MRS feels that it need to purchase a new ambulance every 3 years to properly offset constantly rising maintenance and repair costs. However, previous targeted fundraising efforts have produced only about 50% of the funding necessary for a new ambulance. In addition, holding fundraisers to purchase a new ambulance every 3 years negatively impacts the squad's normal annual fundraising drive.

The Manchester Rescue Squad put together an ambulance fund proposal that would allow them to purchase a new ambulance every 3 years at a cost of about \$150,000.00. It also calculated maintenance and repair needs at \$17,000.00 with all costs increasing by 3% per year. All towns served would contribute based upon the percentage of its population relative to the entire MRS service area. However, this plan was shelved due to the uncertainty of year to year commitments and the Town of Manchester's rejection of it for an alternative plan.

The alternative plan that has provided the necessary ambulance funding for now is referred to as the Manchester Ambulance Lease Proposal. In May 2014, the Town of Manchester agreed to spend up to \$150,000.00 to purchase an ambulance from the town's capital improvement fund pending approval at Town Meeting. The purchase was also contingent upon the other participating towns approving the funding levels identified in the right hand column of the table on the preceding page. This vehicle was delivered in February 2015. Manchester will lease the vehicle to MRS for 9 years at an annual lease payment of \$20,000.00 per year, along with funding from the other towns, for the first 3 years and \$1.00 per year thereafter. While this purchase solves an immediate problem there is no commitment from the town to purchase another ambulance in 3 more years.

There are several factors that lead the MRI study team to have serious doubts about the long-term viability of the Manchester Rescue Squad as an independent, stand-alone entity. First, while the immediate equipment needs have been resolved with the purchase of a new ambulance and the lease agreement with the town, there is no certainty that this was anything but a one-time purchase and arrangement. In addition, and of greater concern, is the fact that MRS continues to operate at an annual deficit,

although the extent of those annual losses could not be determined with the information that was provided to MRI. However, the question must be asked, how long can even modest annual losses be sustained before any reserve funds are depleted?

The Manchester Rescue Squad has offered 2 options for potential long-term solutions to the funding problem independent of a long-term commitment to the ambulance lease program it believes will help them tremendously from a financial standpoint. The first is be taken under the Town of Manchester umbrella and become a municipal department. The Rescue Squad believes that about \$600,000.00 in annual funding would still be realized through third party billing and the subscription program. Some cost savings may be realized through sharing of clerical and support staff and general overall expenses. Concerns associated with this option include the possible loss of donations, and the need to enter into long term shared services or joint endeavors with the other towns and the annual financial implications that could entail.

The second option would involve a logical consolidation with the Manchester Fire Department. While the positives associated with becoming a separate town department would also apply here, some additional cost saving may be achieved by merging the staffs. While this merger would require extensive cooperation and cross training between the two entities as they transition into one with proper leadership, direction, and commitment, the dividends could be substantial. It could also possibly address the potential need for a small career fire force in the Towns of Manchester and Dorset to reduce the workload on the volunteer personnel particularly during the day. The same potential concerns exist with this option as with the first one. In addition, merging career and volunteer staffs could create some friction and result in a loss of some volunteer personnel.

## RECOMMENDATIONS

**Recommendation II-1:** While MRI did not receive accurate response statistics with only just over an average of three (3) responses per day and 1.7 during normal weekday daytimes we do not believe there is a need for two (2) ambulances to be staffed during the day. Unless statistics show a definitive and ongoing need for it due to frequent simultaneous incidents which we believe is unlikely, MRS should give serious consideration to discontinuing the staffing of the second ambulance during the day and staff just one (1) ambulance 24 hours per day. In the infrequent instances, a second ambulance is needed during the times when volunteer availability is low personnel who respond to staff it could be compensated with an on-call type of stipend.

**Recommendation II-2:** Manchester Rescue Squad should revise its staffing protocol to one (1) EMT and one (1) paramedic on each ambulance.

**Recommendation II-3:** The Town of Manchester and Manchester Rescue Squad should work proactively to address the squad's long-term financial needs and viability. Other local towns who are also stakeholders in MRS operations should be invited to participate.

**Recommendation II-4:** The Town of Manchester and Manchester Rescue Squad should give serious consideration to merging MRS with the Manchester Fire Department. This merger would require the creation of a separate division within the fire department led by a deputy fire chief who would be responsible for day-to-day administration of the EMS system.

**Recommendation II-5:** If recommendation II-4, above is implemented, the town should attempt to retain key MRS staff to assist with the transition and continue to operate a high quality EMS service. However, the town should go thru a full recruitment, screening, and selection process to find the most qualified personnel to permanently fill these positions.

**Recommendation II-6:** If recommendation II-4, above, is implemented the town should give consideration to utilizing per-diem staff to the extent possible to help to offset personnel costs.

**Recommendation II-7:** If recommendation II-4, above, is implemented the Town of Manchester and the Manchester Fire Department should give consideration to applying for a federal Staffing for Adequate Fire and Emergency Response (SAFER) grant for the purpose of recruiting and retaining additional volunteer personnel to help operate this new service.

**Recommendation II-8:** If recommendation II-4, above, is implemented the Town of Manchester and the Manchester Fire Department should attempt to recruit, train and develop volunteer personnel in their service area, particularly personnel who are already fire department members, to provide an EMS first responder force to get assistance to the scenes of serious medical emergencies more quickly and provide basic life support and/or patient stabilization until the arrival of the ambulance.

**Recommendation II-9:** If the Town of Manchester assumes responsibility for EMS operations the town should attempt to enter into long term shared services agreements with the other participating towns to assure a steady stream of revenue, offset operating expenses and help to establish financial stability moving forward.

**Recommendation II-10:** The Town of Manchester should consider establishing an enterprise account to enable them to utilize financial receipts to help offset the cost of the EMS operations.

**Recommendation II-11:** The current ambulance billing rates should be evaluated and increased to the maximum rate permissible. Collection rates should also be analyzed and adjustment made if necessary to increase collections.

**Recommendation II-12:** The current contract with the third party billing company should be renegotiated to a more reasonable rate of between 4% and 7% of revenue collected. If the contract cannot be renegotiated it should be terminated at the earliest possible time and placed out for competitive bids.

**Recommendation II-13:** The Manchester Rescue Squad is presently in possession of a 2011 Chevrolet Tahoe that was donated to the Town of Dorset by a local resident to be used by the town as a first response unit. Manchester rarely uses this vehicle as they make the vast majority of their responses in their ambulances. This unit should be returned to Dorset and stationed in one of the fire stations (and set up if it is not already so equipped) for use as an EMS quick response unit.

## **APPENDIX B**

**2022**

**Town of Manchester, VT**

**EMS Study**

**Project Summary**

**Publicly Released on January 11, 2022**



## **Town of Manchester Vermont EMS Study Project Summary**

Municipal Resources Inc. (MRI) is a New England based corporation that was established more than 30 years ago and is very well known for its expertise in public safety including police, fire and EMS operations. MRI has completed hundreds of projects from Aiken, South Carolina to Presque Isle, Maine. However, we are best known for our expertise in working with and providing viable solutions for New England municipalities. In 2015 MRI conducted a public safety study for the communities of Manchester and Dorset, this study included an evaluation of Emergency Medical Services (EMS).

MRI provides professional, technical, and management support services to municipalities and schools throughout New England. Municipal Resources operates offices in two locations in New Hampshire, and one in Massachusetts. We are registered to do business in Maine, New Hampshire, Vermont, Massachusetts, Connecticut, Rhode Island, New Jersey, New York, and Pennsylvania.

Among the areas of expertise available are department assessments, organizational studies, personnel recruitment, personnel administration, collective bargaining, community and economic development, budget/finance, and general management.

MRI wants to help solve problems and provide solutions for future success. We do not assess blame; rather, we simply work to gain an understanding of past events to build a framework for future success. We do not put forth idealistic, unachievable, or narrowly focused solutions.

Our objectives are:

- To help agencies obtain maximum value for limited tax dollars.
- To identify and help communities manage the risks associated with public safety functions.
- To raise public awareness of the value and professionalism of their public



resources.

- To help local leaders develop and execute plans that best meet their community's needs, given the resources available.

MRI utilizes practitioner-based teams of subject matter experts to provide municipalities with experienced based observations and recommendations. The Select Board and Town Manager asked MRI to provide an outside evaluation of EMS, evaluate pandemic based risk and if warranted, make recommendations for change. Our objective during this project was to concentrate on the service level provided to the Town of Manchester.

Observations (*italicized*) and findings (**bolded**) of the current Manchester EMS study include the following:

**Observations:**

1. *The current EMS provider has a deep-rooted internal culture that is not focused on the Town of Manchester as the largest customer (66-70% of volume).*
2. *Despite multiple requests, the current EMS provider has not substantively participated in any pandemic related planning with the Town of Manchester.*
3. *Town Public Safety Departments and the Town Manager indicated that there was a lack of integration, coordination and training with the current EMS provider.*
4. *Numerous interviews revealed a perceived lack of EMS provider involvement within the community (Manchester).*
5. *Members of the EMS providers Board of Directors indicated that Manchester is one of five of the communities served and all deserve equal (1/5th) consideration.*
6. *Members of the EMS providers Board indicated that their organization would not participate in community specific events unless all member communities benefited.*
7. *The 2015 recommendations provided through a public safety report were not substantively considered. None of the 13 recommendations were implemented.*
8. *The lack of a sense of urgency/rapid response to calls was noted as a universal interview theme and ongoing operational concern.*
9. *Manchester Public Safety Officials indicated that they regularly receive complaints and concerns relative to EMS operations.*

**Findings:**

10. **Manchester has the highest call volume and pays 68.5% of increasing fees (\$190,000 offset by rent) (49.9% of population served).**



11. **There is no communication between the Manchester representative on the NRS Board and Select Board or Town Manager. This is atypical.**
12. **Interviews revealed a consistent theme that NRS is largely unresponsive to Manchester's needs and requests which are far greater than the other communities served due to both population and serving as a regional hub.**
13. **The revenue stream is not optimized (towns pickup the remainder, and Manchester picks up the majority of that balance).**
14. **There is excessive downtime based on call volume.**
15. **Customer service issues have been documented by public safety officials and health care providers in Manchester.**
16. **Despite being the largest stakeholder Manchester has little power to effect change under the current system.**
17. **The Covid 19 Pandemic has strained resources and produced an increasing service demand.**
18. **Pandemic planning lacks EMS involvement which has expanded the risk profile of the community.**
19. **Response times are atypical considering that a staffed unit is based in Manchester.**

**Conclusion:**

After careful consideration and reflection on industry best practice and the service level currently provided to the Town of Manchester, our team does not believe that Manchester is being well served by the current configuration of emergency medical services (EMS).

## **APPENDIX C**

**2022**

**Town of Manchester, VT**

**EMS Study**

**Public Presentation**

**Presented on January 11, 2022**



## **Manchester Prehospital CarePandemic Planning Study**

**Presentation to the Select  
Board**



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## **Why Are We Here**

**The Selectboard and Town Manager asked MRI  
provide an outside evaluation of emergency  
medical services and pandemic based risk and if  
warranted, make recommendations for  
changes.**

**Note- Our objective was to concentrate on the Town  
Manchester and not the other communities that EMS  
contracted to by Northshire Rescue Squad**



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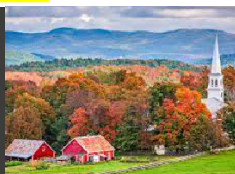
## 2015 Manchester/Dorset Public Safety Study

- 13 Recommendations which were known to the MRS/NRS Board but no action was taken.
  - In 2015, Manchester provided 63% of overall volume.
  - Our study raised concerns over culture and fiscal viability.
  - Lack of action on recommendations is a factor that has contributed to increasing costs for member communities.

Following this study, Chairman Ben Weiss suggested MRS would look at becoming a municipal department in Manchester or Dorset. No action was taken.



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## Steps Taken to Date

- Evaluated Covid 19 planning and impacts – determined programmatic risks based on pandemic related demand.
- Data Collection and Analysis
  - Dispatch records
  - Emails
  - Agreements
  - Budgets
- Interviews
  - Police Chief – Dispatchers
  - Fire Command Staff
  - Northshire Board of Directors – Northshire Director
  - Medical Center Staff- Medical Center Foundation
  - Selectboard – Town Manager



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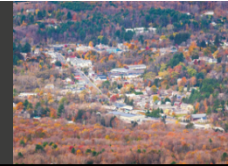


## Observations/Findings

1. *NRS has a deep-rooted internal culture that is not focused on the Town of Manchester as the largest customer (66-70% of volume).*
2. *Despite multiple requests, NRS has not substantively participated in any pandemic related planning with the Town of Manchester.*
3. *Town Public Safety Departments and the Town Manager indicated that there was a lack of integration, coordination and training with NRS.*
4. *Interviews revealed a perceived lack of NRS Involvement within the community (Manchester).*
5. *Members of the Board of Directors indicated that Manchester is one fifth of the communities served and all deserve equal consideration.*
6. *Members of the Board indicated that NRS would not participate in community specific events unless all members benefited.*
7. *Lack of substantive consideration of 2015 recommendations.*



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## Observations/Findings Continued...

7. *The lack of a sense of urgency/rapid response to calls was noted as a universal interview theme and operational concern.*
8. *Manchester Public Safety Officials indicated that they regularly receive complaints/concerns.*
9. **Manchester has the highest call volume and pays 68.5% of increasing fees (\$190,000 offset by rent) (49.9% of population served).**
10. **There is no communication between the Manchester representative on the NRS Board and Selectboard or Town Manager. This is atypical.**
11. **Interviews revealed a consistent theme that NRS is largely unresponsive to Manchester's needs and requests which are far greater than the other communities served.**
12. *Members of the Selectboard indicated that cost is a driving factor in future decisions.*
13. *Members of the Selectboard indicated a willingness to explore an overall community and public health public/private partnership to reduce cost, enhance and optimize service.*



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## Observations/Findings Continued...

14. **The revenue stream is not optimized (towns pickup the remainder, and Manchester picks up the majority of that balance).**
15. **There is excessive downtime based on call volume. This could have been filled with community wellness/pandemic response events.**
16. **Customer service and attitude issues have been documented by public safety officials and health care providers in Manchester.**
17. **Despite being the largest stakeholder Manchester has little power to effect change as the NRS Board indicated that all Towns are equal.**
18. **The Covid 19 Pandemic has strained resources and produced an increasing service demand.**
19. **Pandemic planning lacks EMS involvement which has expanded the risk profile of the community.**
20. **Response times are excessive considering a staffed unit is based in Manchester and often exceed CAAS Standards.**



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## Incident Volume

	2019			2020			2021 thru 9/25
Manchester	893	68%		770	67%		663 66%
Dorset	204	16%		200	17%		194 19%
Danby	91	7%		83	7%		57 6%
Mount Tabor	20	2%		19	2%		19 2%
Winhall	19	1%		9	1%		13 1%
Mutual aid	89	7%		70	6%		64 6%
	1,316			1,151			1,010

Note: In 2020 service demand decreased based on pandemic concerns, 2021 data projects a 20.5% increase over 2020 volume and a 5% increase over 2019 volume. Based on the continuing pandemic this level of service demand is expected to continue to increase.



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## Incident Statistics

Incidents by Month	2019	2020	2021
January	72	109	98
February	44	105	83
March	60	88	101
April	60	55	110
May	81	94	112
June	78	95	115
July	87	94	142
August	81	100	131
September	93	102	115
October	86	124	N/A
November	69	94	N/A
December	75	91	N/A

Note: 2021 numbers are from 1/1 TO 9/25

Incidents by Time of day	2019	2020	2021
0000 to 0459	120	98	104
0500 to 0759	125	103	92
0800 to 1159	325	296	223
1200 to 1659	289	273	266
1700 to 1959	282	214	168
2000 to 2359	183	167	154

Peak Hours – 1.68 calls per day

Note: 2021 numbers are from 1/1 TO 9/25

Incidents by Day	2019	2020	2021
Sunday	13.0%	12.4%	13.3%
Monday	13.4%	16.2%	14.7%
Tuesday	13.5%	14.8%	15.6%
Wednesday	16.6%	14.8%	14.1%
Thursday	14.5%	14.7%	14.1%
Friday	14.6%	13.3%	15.7%
Saturday	14.4%	13.8%	12.5%



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## What are the Options

- 1) Status Quo – enhanced communication /agreement
- 2) Create a Town EMS Department  
2 Plus Town Based EMS/Public Private Partnership.
- 3) Bid Private 3<sup>rd</sup> party service – not considered a viable option in the area

### Option Evaluation and Comparison:

- Costs
- Advantages
- Disadvantages



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## Option 1 – Continue Current Service

- Continue services with Northshire Rescue Squad (NRS)
  - Customer Service - Management change essential
  - Negotiate that NRS be more actively involved in the Manchester events and operational planning.
  - Negotiate that NRS must take an active seat at the table representing EMS in Emergency Management meetings.
  - Requires an understanding of the issues from Manchester's perspective and a strong internal commitment to change.
  - Requires a better relationship with the Town Government (administrative and public safety departments).

*This may work in the short-term but is an unsustainable model as substantive Manchester focused change is contrary to internal culture observed.*



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### • Advantages

- Will require the least amount of work.
- Does not create the friction of change.
- No new employees will need to be hired.
- Current fund raising “subscription plan” will be able to continue.
- Known cost equation for the next few years.



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### Disadvantages

- Same issues and concerns are likely to continue.
- Manchester has minimal control or management input.
- Once the NRS Agreement is signed – Manchester is committed.
- Relationships with Town Departments will become more difficult following this study.
- Likely no improvement in Manchester specific involvement.
- The revenue stream not optimized.
- Manchester is unable to control costs (approximately 14% increase in Manchester).



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### Option 2/2 Plus – Transition to Town EMS System

If this option is selected the Selectboard Chair and Town Manager have stressed that the other communities served by NRS would not be left without service and that they would be invited to transition into the new system.

Our team believes this sentiment should be echoed by the Select Board.



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## Option 2 -Transition to Town EMS System

- This will be the costliest option.
- Will require a solid transition plan.
- The town would hire and maintain two ambulance crews during the day and one crew at night.
- Will require a new Town Department to be created.
- License will need to be obtained from the State.
- Ambulance and equipment will need to be purchased.



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- Requires extensive public health work to develop an operational system by July 2022.
- Protocols and Procedures will need to be developed.
- Second crew should be evaluated for effectiveness after one operational year. (1.68 calls per day).
- The second crew could enhance value through pursuing a mobile integrated health strategy.



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## Option 2/2 Plus – Transition to Town EMS System

If this option 2/2 Plus is selected, and NRS can not continue to provide prehospital care and transportation, current NRS Employees should be encouraged to apply to fill the positions created by the Town and should receive a wage increase. The proposed pay increase would bring wages in line with regional averages which are higher than those paid by NRS. This would increase the ability to recruit and retain high quality EMS Professionals.



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### Advantages

- The Town will have full control of the program.
- Facilitates an increased level of public health and pandemic planning.
- The Town will receive revenue from transports and can accept donations for equipment.
- Allows the Town to have optional services provided after the initial set up and operational period.
- Will allow for joint fire, EMS and police training and enhance response coordination and response efforts.
- Creates a community focused culture and work ethic.
- Enhances the overall level of service to the community and reduces internal and external concerns.
- Allows for the development of community outreach and pandemic services.
- Brings police, fire and EMS under municipal direction as critical services.
- Redeploys EMS budget with a Manchester focus.
- Utilizes, technology, purchasing, finance and human resource, payroll, AP, maintenance, legal and consulting infrastructure already in place in the Town.
- Municipalities tend to be more transparent in terms of records, posting agendas, meeting minutes.



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### Disadvantages

- Start up costs need to be anticipated.
- Another budget to review and approve annually.
- Increases the number of Town employees.
- Increases injury exposure.
- Creates uncertainty within the four other towns currently served by NRS.
- The Town will need to develop HIPPA protocols.



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### Option 2 Plus – Public – Private System

- Create a Manchester-based system open to collaboration with other health resources.
  - Will significantly help to offset the costs of program.
  - Provide a constant training environment for staff and enhance medical skills.
  - Presents an opportunity for cost sharing of supplies and equipment.



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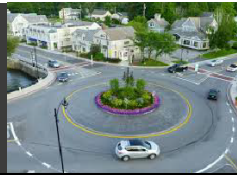
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**Advantages (in addition to those in option2)**

- Allow for skills enhancement by working together with other public health resources.
- Increases flexibility (mobile outreach, Covid testing and vaccination)
- Will allow for joint purchasing of equipment at a reduced cost.
- Provides an opportunity to fundraise and donate equipment etc... to the new EMS system.
- Enhances the potential for tax deductible donations.
- Will allow for a stronger relationship between first responders and health care professionals.
- Develops a cooperative effort for QA and QI.
- Allows for full involvement with towns planning for events.
- May allow for more efficient program management.



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**Disadvantages ( in addition to Option 2)**

- Will require an MOA, MOU or contract with partners.
- Public education required to identify this as a municipal Department supported and optimized by a private partnership.
- Would transition to a fully municipal system should the partnership not be evaluated to be beneficial to the partners.



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## Public Private Partnership Six Areas of Focus

- Collaborative fundraising.
- 2<sup>nd</sup> unit available for mobile integrated health– limit downtime, maximize skills.
- Shared program management.
- Program direction/training/QA-QI.
- Economy of scale purchasing.
- Community paramedicine – revenue source.



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## Financial Impacts

- Option 1 – Current and future budget as proposed by the Northshire Board. Costs have been rapidly increasing and lack the actions/controls that we outlined in 2015.

- FY 22 \$183,819.00
- FY 23 \$190,969.00

Note: this amount is offset by rent and utility payments back to Manchester for facility and dispatching utilization.



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## Option 2 & 3 – July 2022 Startup

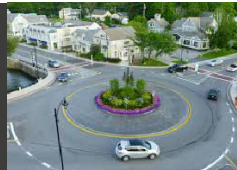
### Start up cost Projection - ARPA Funding

- Program development - \$92,500
- Ambulances (10-year life expectancy – \$120,000)
  - Order 1 new purchase one used, 2-year delivery
  - Replace one unit every 5 years using a lease in arrears strategy
- Operational Equipment (5-10 year life span) \$250,000
- Communications \$20,000
- Initial drugs and disposable supplies \$20,000

**TOTAL \$502,500 in ARPA Funds**



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	Option 1	Option 2	Option 2 Plus
<b>Expected Net Operational Cost</b>	\$190,969 Gross Cost. \$ 63,334 Net Cost	Cost Change – increase of (\$15,000 – 25,000) or cost neutral subject to revenue stream.	Cost Change - \$75,000 - \$80,000 savings.
	NO CHANGE	SLIGHT INCREASE/COST NEUTRAL	POSTIVE CASH FLOW

**Note: Under Option 1 - Manchester receives approximately \$127,635 in reimbursement for fixed costs (utilities, dispatch, rent) that will no longer be paid to the Town.**



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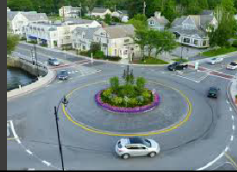
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## MRI Recommendation

- Each of the options have some level of advantages and disadvantages.
- Option 1 will not produce substantive change
- Option 2 is the costliest but gives the town full control
- **Option 2 Plus has many of the same positive attributes of option 2 with some cost sharing.**



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## Time for a Change?

- MRI believes that Manchester is not being served well by the current configuration and we believe this is an opportunity to enhance prehospital services provided to Manchester.
- Options 2 and 2 Plus provide an opportunity to enhance pandemic/public health planning and coordination.
- Increasing EMS involvement in Covid response and community outreach will reduce the community risk profile.
- If you are going to make a change in the EMS delivery system now is the time.
- ARPA Funding is a rare opportunity to take a new path.
- **Expect the current situation and relationships to deteriorate following the release of this study.**



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## Necessary Actions

- Board needs to decide if the NRS contract will be renewed.
- If the Contract is not renewed the Board should immediately pursue the following actions:
  - The Town Manager should be authorized to immediately initiate the development of Option 2 or 2 Plus.
  - If Option 2 or 2 Plus is selected – Program development should start in January 2022.



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## Thank You!

## Questions and Comments

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## **APPENDIX D**

**2022**

**Town of Manchester, VT**

**EMS Study**

**Project Team**

## THE PROJECT TEAM

### Director of Fire Services

**Brian P. Duggan, Director Fire Services Group**, retired from the Fire Department in Northampton, Massachusetts, where he instituted substantial changes to modernize and restructure the entire department including equipment, facilities, personnel, and training. In conjunction with his staff, Brian integrated Emergency Medical Services (EMS) into the organization and created a regional Advanced Life Support (ALS) Program that currently serves 18 communities within the Northampton Area. He formerly commanded the Northborough, Massachusetts, Fire Department, and has significant experience with the Massachusetts Department of Fire Services where over three decades, he held several key positions. Following his retirement, Brian has continued his active fire service involvement by serving as both a volunteer chief fire officer and through continuing to develop training and certification programs as a program Coordinator for the Massachusetts Department of Fire Services.

Mr. Duggan developed and directed the Graduate and Undergraduate Fire Science Programs at Anna Maria College in Paxton Massachusetts from 1995 - 2003. Mr. Duggan has a Business Management/Fire Science degree from Providence College and a Master's Degree of Business Administration (MBA) from Nichols College in Dudley, Massachusetts. He is also a graduate of the National Fire Academy Executive Fire Officer Program and the Senior Executive Program for State and Local Leaders at Harvard University. In December 2012, Mr. Duggan received a Master's Degree in Homeland Security through the Naval Post Graduate School based in Monterey, California, where his thesis entitled "*Enhancing Decision-making during the First Operational Period of Surge Events*" was selected as an outstanding thesis. He was one of the first fire service professionals to be designated as a Chief Fire Officer by the Commission on Fire Accreditation International.

Brian led the Massachusetts fire service through his affiliation as Chairman of the Fire Chief Association of Massachusetts Technology Committee and as a Regional Director on the Massachusetts State Fire Mobilization Committee. Mr. Duggan has authored several publications, inclusive of writing Section 7, Chapter 3, Fire Department Information Systems, in the Nineteenth and Twentieth Editions of the National Fire Protection Association's Fire Protection Handbook. Chief Duggan has been affiliated with MRI as a subject matter advisor since 2002 and he has served as Director of Fire Services since 2015. Currently, Mr. Duggan is regarded as an expert specific to fire service response to photovoltaic and battery energy storage system (BESS) emergencies. He has developed several nationwide training programs providing first responders with new insight on these emerging challenges.

## **Project Manager**

**David Houghton** is a devoted fire and emergency management professional who has recently retired from the Wayland Massachusetts Fire Department after a distinctive 38-year career from being a call firefighter and rising through the ranks to Fire Chief. Along with dedicating his service to the Town of Wayland, he continues to work for the Massachusetts Department of Fire Services as both an instructor and in the Special Operations Division doing special projects. In 1999 he was given the challenge by the State Fire Marshal to develop and implement what today is known as Special Operations. This development included designing, building and implementing specialized equipment and staffing to respond to Emergency and planned incidents throughout the Commonwealth. This program was a shared vision between David and the Fire Marshal and today has been shared in whole or in part in other areas of the country. David has a B.S. degree in Fire Science, an A.S. Degree in Fire Science and Technology, and has completed a Local Government and Management program with Suffolk University and the Massachusetts Municipal Association. David has a diverse background Firefighting, EMS (ALS and BLS), Dispatch, Fire Prevention, Emergency Management and operations. He is a nationally certified Firefighter, Fire instructor, Fire Inspector, Fire Officer. He is a certified Emergency Medical Technician both at the National Level and in the Commonwealth of Massachusetts.

David has most recently continued his fire service career by being appointed as a call firefighter with the Town of Moultonborough Fire Rescue, and is a certified New Hampshire Emergency Medical Technician. He continues to be active with the Commonwealth of Massachusetts Fire and Ambulance Mobilization team in the continuous updating and redevelopment of the program. Prior to his retirement as Fire Chief, David was an active member in the Massachusetts Fire District 14 where he was a driving force behind the creation of the District Operational budget, an operations manual and the formalizing of the various specialized teams within the district. David was also selected as the Chief overseeing the Fire District communications team and equipment as well as serving on several other progressive programs within the district. He is a member of the Fire Chiefs Association of Massachusetts, and the International Association of Fire Chiefs.

**Christopher W. Norris** has been involved in the fire service since April 1994 and currently serves as the Fire Chief for the City of Easthampton, MA. Chief Norris completed his Master's Degree in Fire Science and Administration from Anna Maria College, a Master's Degree in Public Administration from Westfield State University, and his PhD in Public Policy and Administration with a concentration in Emergency Management. Mr. Norris has completed the *Executive Fire Officer Program* through the United States Fire Administration and also the prestigious *Senior Executive in State and Local Government Program* through the Kennedy School of Government at Harvard University. Most recently, Chief Norris was recognized by the Center for Public Safety Excellence (CPSE) as only one of thirty-one individuals in the entire Country to earn both International designations as a Chief Fire Officer (CFO) and Chief Emergency Medical Services Officer (CEMSO). In addition, Mr. Norris has been recognized as a Chief Training Officer (CTO)

and Fire Marshal (FM) through the Center for Public Safety Excellence. In 2014, Mr. Norris was selected as one of twenty fire service personnel across the Country to participate in the Fire Service Executive Development Institute (FSEDI) Program through the International Association of Fire Chiefs sponsored by Motorola. This is a year-long program that examines current issues, challenges, innovations, and leadership models in the fire service. Mr. Norris also teaches for the Massachusetts Firefighter Academy as one of the Lead Instructors in the Structural, Flashover, and Instructor Methodology Programs, and is the Statewide Program Coordinator for the Call/Volunteer Recruit Training Program. Mr. Norris is a member of the International Association of County/City Managers Association (ICMA), Fire Chiefs Association of Massachusetts (FCAM), New England Association of Fire Chief's (NEAFC), National Fire Protection Association (NFPA), Hampshire County Fire Chiefs, Western Massachusetts Fire Chief's Association (WMFCA), Hampshire County EMS, and the International Association of Fire Chiefs (IAFC).